

Science Toolkit: Grade 8 Objective 1.B.1.b

Student Handout: Science: Grade 8 Objective 1.B.1.b

Standard 1.0 Skills and Processes

Topic B. Applying Evidence and Reasoning

Indicator 1. Review data from a simple experiment, summarize the data, and construct a logical argument about the cause-and-effect relationships in the experiment.

Objective b. Explain that what people expect to observe often affects what they actually do observe and that scientists know about this danger to objectivity and take steps to try to avoid it when designing investigations and examining data.

Selected Response (SR) Item

Question

A scientist reads about an experiment conducted by a researcher. The scientist conducts the same experiment and collects data but this data contradicts what was published by the researcher.

What should the scientist do since the data from the two experiments is contradictory?

- A. Repeat the experiment to check the data collected.
- B. Contact the researcher who first performed the experiment.
- C. Contact the scientific journal that published the experiment.
- D. Disregard the data collected since the experiment was published.

Correct Answer

A. Repeat the experiment to check the data collected.

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